

Multi-Professional Involvement in Managing a COVID-19 crisis in Sri Lanka

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Introduction

Since the onset of the COVID-19 pandemic in December 2019, a tumultuous period for health care systems was marked globally and Sri Lanka was in it as well because the health systems had to respond to the challenges posed by the COVID-19 pandemic. In Sri Lanka, many professions altered their departments of working, in order to support patients while managing the COVID-19 crisis as well. In this paper, how the members from various professional groups came together in order to manage the COVID-19 pandemic, is discussed.

What is multi-professional team- work?

In the field of management and organizational science, the concept of teamwork is suggested as the best in stable conditions where people have time and resources to learn how to work collaboratively. Teamwork is characterized by coordinating the expertise available. There is a wide variety of terms used to depict the cooperative and collaborative work of various health professional groups (Finn *et al.*, 2010). The words with the prefix

'multi' denote several variegated professional groups working collectively (Payne, 2000). A concern for various professional groups, functions and activities, which are associated with the groups is suggested by the word 'professional' (Payne, 2000). In consideration of the multidisciplinary/multi-professional workings, there are multiple definitions. Fundamentally, all these definitions explain a group of individuals who belong to distinct professional groups or varying disciplines within a particular working group, working collectively. Petrie (1976) defined multi-professionals working as a collection of people from varying health and social care professions but who do not necessarily interact. A broad array of health professional groups, with different knowledge, skills and qualifications, getting together within a particular structure will ensure the provision of health promotion services (Solheim *et al.*, 2007). According to Martin and Henderson (2001), a team is identified as a group possessing a common goal or task, in which the pursuit requires coordination and collaboration of the activities of its members, who have constant and persistent interactions among each other.

Teamwork is essential for the optimal performance level in a health sector (Clark *et al.*, 2009). Collaboration is identified as a means of bringing together strengths of numbers of people and organizations, leading them on to make better decisions; the outcomes of collective working (Jansen, 2008). Naidoo and Wills (2000), stated that teamwork increases knowledge and understanding of each other in the organizations and thereby helping them to clarify their roles while overcoming rivalry of each other within the organization.

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The increase in resources can be used in an effective manner by jointly commissioning the services from the health promoters to develop the health of the people (Jansen *et al.*, 2008b). Joint-working provides a higher degree of job satisfaction for the health promotion staff as it increases the morale for the team and offers mutual assistance for the members in their team (Hosman, 2000).

Teams are complex structures, in terms of membership structure, operations and organizational culture. According to 'Plant's Iceberg Model' the ways and means by which an organization operates are the 'visible' part of teamwork, and the factors which can influence change and organizational development are submerged (Plant, 1989). Therefore, hidden issues related to teamwork should be assessed and addressed in optimizing a team's function.

COVID-19 Crisis in Sri Lanka

In Sri Lanka, the first COVID-19 case was reported on 28th January 2020. Since then up to 08th March 2022, the cumulative number of confirmed cases is 653,661, and the number of deaths and recovered cases are 16,350 and 618,386 respectively (Health Promotion Bureau, 2022). Sri Lanka was able to manage the spread of COVID-19 in 2020 with the imposition of strict lockdown measures, together with collaboration from the Sri Lanka Police and the armed forces. However, since July 2021, Sri Lanka has witnessed a rapid increase in the number of COVID-19 cases which had its onset around May 2021. The number of daily test-positive patients exceeded 5000 and the number of deaths were also rapidly increasing during the height of the surge. The number of healthcare workers and infrastructure capacity available in the hospital system for optimal functioning also rapidly declined due to the fast spread of the coronavirus.

The management of COVID-19 in Sri Lanka via a multi-professional approach

Sri Lanka's COVID-19 response is characterized by a strong focus on the preventive approach and contact tracing with

rational utilization of available resources. Since the reported first local case on 11th of March 2020 (Health Promotion Bureau, 2022), the responses of Sri Lanka towards COVID-19 were prompt, critical, well-organized and coordinated. When a person became COVID-19 positive, he/she was exclusively admitted to a designated government hospital while his/her close contacts were traced actively through an efficient disease surveillance system which was operated by the Epidemiology Unit of the Sri Lankan Ministry of Health (Arambepola *et al.*, 2021). For most of the course of the pandemic in 2021, all patients who tested positive were managed at healthcare institutions. Asymptomatic or mildly symptomatic patients with no or well-controlled comorbidities were admitted to Intermediate Care Centres (ICC) for monitoring and symptomatic management and discharged in 14 days. Those with more marked symptoms, uncontrolled comorbidities and other complications were admitted to hospitals for closer monitoring and specialized management.

Even though this approach was proved to be efficient during the early phase of the pandemic, it became evident with time that it was not sustainable due to the rapid increase in the number of COVID-19 positive cases since July 2021. The number of daily reported test positive patients exceeded 3000 and the actual number of new patients per day was estimated to be around 6000 to 9000, during the peak of the surge. The bed capacity related to COVID-19 patients in the country was increased to 27,000, even by bed allocations from other units of hospitals, as an immediate response. The number of healthcare workers available for effective functioning of the system too decreased with a significant proportion acquiring COVID-19. Thus, the Sri Lankan healthcare system was at a critical tipping point, with an unrivalled increase in demand with rapidly diminishing resources. It was necessary to prevent overburdening the already fraught hospitals as well as the staff (Jensen *et al.*, 2020).

The primary healthcare workers were the frontline personnel managing this pandemic crisis. Due to the rapid increase in the number

of COVID-19 infected patients, the healthcare workforce available for optimal functioning of the system too got significantly reduced, with a noteworthy percentage acquiring the infection and the remaining workforce having to contend with physical and mental exhaustion. A virtual triaging system designed for the identification and evacuation of those who needed hospitalization and facilitated home management for mild and asymptomatic patients was required to counteract and effectively manage the rapid increase in the COVID-19 patients.

The Sri Lanka Medical Association (SLMA) introduced the Doc Call 247 Service in August 2020. This vital service is still being continued with the partnerships of the Ministry of Health, SLMA, '1990 Suwa Seriya' Ambulance Service and with assistance from the Sri Lanka Telecom-Mobitel mobile telephone network. The other mobile telecommunication operators were connected into a single central system by the SLT- Mobitel platform with the deployment of cutting-edge technical portals. In addition to the Interactive Voice Response (IVR), Short Message Service (SMS) and WEB systems, the SLT- Mobitel integrated a Big DATA system which enabled the SLMA to analyse the data reports in real time. The implemented alert system sending periodic monitoring updates to the relevant stakeholders *via* different channels has warned on the situations, which could occur in the near future, thereby initiating the provision of the facility to develop proactive measures that could be taken to mitigate against the impact. The digital integration of 247 and 1990 Suwa Seriya systems has streamlined the process and ensured an efficient mechanism. The 247 platform and the 1990 Suwa Seriya system was inter connected within a single day. Further customization and changes were done in order to increase the ease of use and to have better visibility at both ends. Partnership between SLMA and 1990 Suwa Seriya was formalized through a MOU.

The objectives were: -

- To decrease the number of non-urgent admissions to the hospitals,

- To provide accurate information to the patients who are receiving home-based care
- To identify and evacuate patients who are in need of immediate and urgent care, to hospitals.

The SLMA initiation of the Doc Call 247 service mainly focused on providing advice to patients and consisted entirely of volunteers ranging from the specialists to medical students. They were able to enter into the system as per their convenience by 'opting in' and 'opting out'. When the doctors were busy, they were able to opt out of the system and when they were not busy, they could join in and answer calls. There was a roster system in place as well, to ensure that a particular number of doctors were available at a given time. There were considerable numbers of medical students, doctors and specialists across the globe, who joined this mission of humanitarian services to serve the country at that most crucial of times.

This portal ensured that those who required hospitalization once there were identified and the ambulance service was called to take them to the hospital, were given the priority for admission to the hospitals, and those asymptomatic or mildly symptomatic were given necessary advice and kept at home with regular medical advice. So far, up to 25th March 2022, Doc call 247 has attended to over 75,000 callers. Out of the 75,000 calls received on Doc call 247, only around 1,500 patients needed urgent care and hospitalization. There was no on-admission deaths reported with 247 service. Those who could be managed at home were given health education and clear advice on what to do, what to avoid and when to seek medical care.

As the Doc Call 247 was a service catering to the needs of the people to their benefit, there were certain obstacles as well, such as issues related to the coordination of the stakeholders due to technical matters and receiving 'prank' and unnecessary calls which wasted the opportunities for another essential caller. New mechanisms were adopted under the guidance of IT professionals to overcome these constraints.

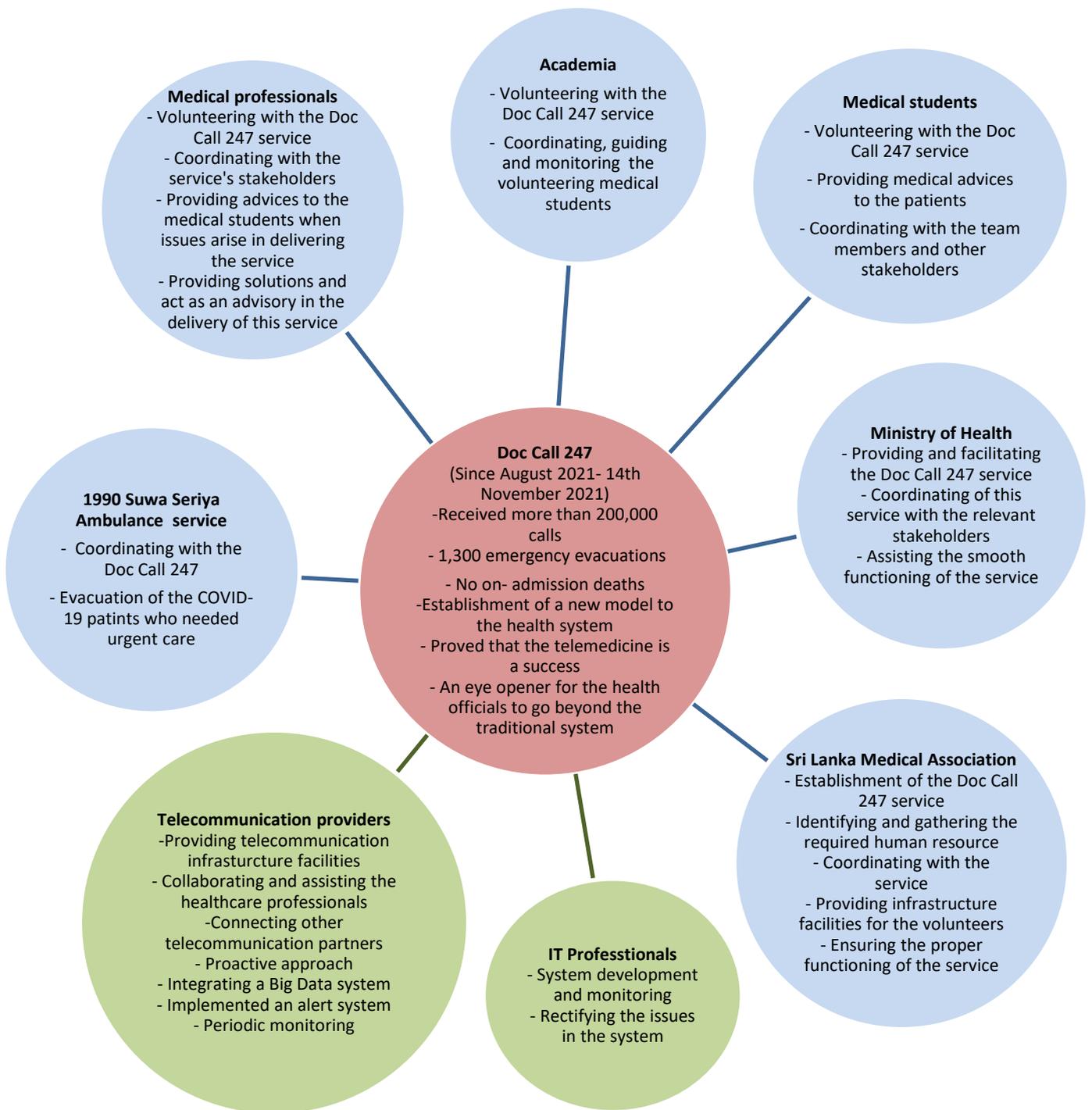


Figure 1: Multi-professional involvement in the Doc Call 247 service

Conclusion

This initiative is a success story of a digital triage system and that has minimized the burden on the healthcare system. The crisis situations needed assistance from all stakeholders including sectors previously underutilized in the provision of healthcare, including the information and communication systems. Although operating in a resource-limited setting, Sri Lanka has been able to integrate its healthcare system with new technology in order to rise to the call of the hour. This has made it possible for the country to reduce the burden on treatment centres as well as healthcare professionals and ensure equity in the distribution of its resources. Furthermore, this innovative approach to healthcare provision must be strengthened in order to meet the ever-increasing demands in the face of the pandemic. It would be a valuable tool in dealing with similar catastrophes and disasters in the future too.

The success of this initiative has demonstrated that the existing infrastructure can cope, the essential technologies are in place, and that health professionals are already familiar with the concept. Institutional support is necessary if this endeavour is to grow and become sustainable, and champions should be identified at all levels; user-driven models that foster a sense of ownership.

The combined impact of the tireless efforts of frontline health professionals and non-health professionals, the island-wide vaccination programme, movement restrictions, together with the integrated helpline information system has reduced the burden on the all-important healthcare services.

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